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No 117

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Notes -

on

Materia Medica & Pharmacology

delivered

by

C. B. Wood

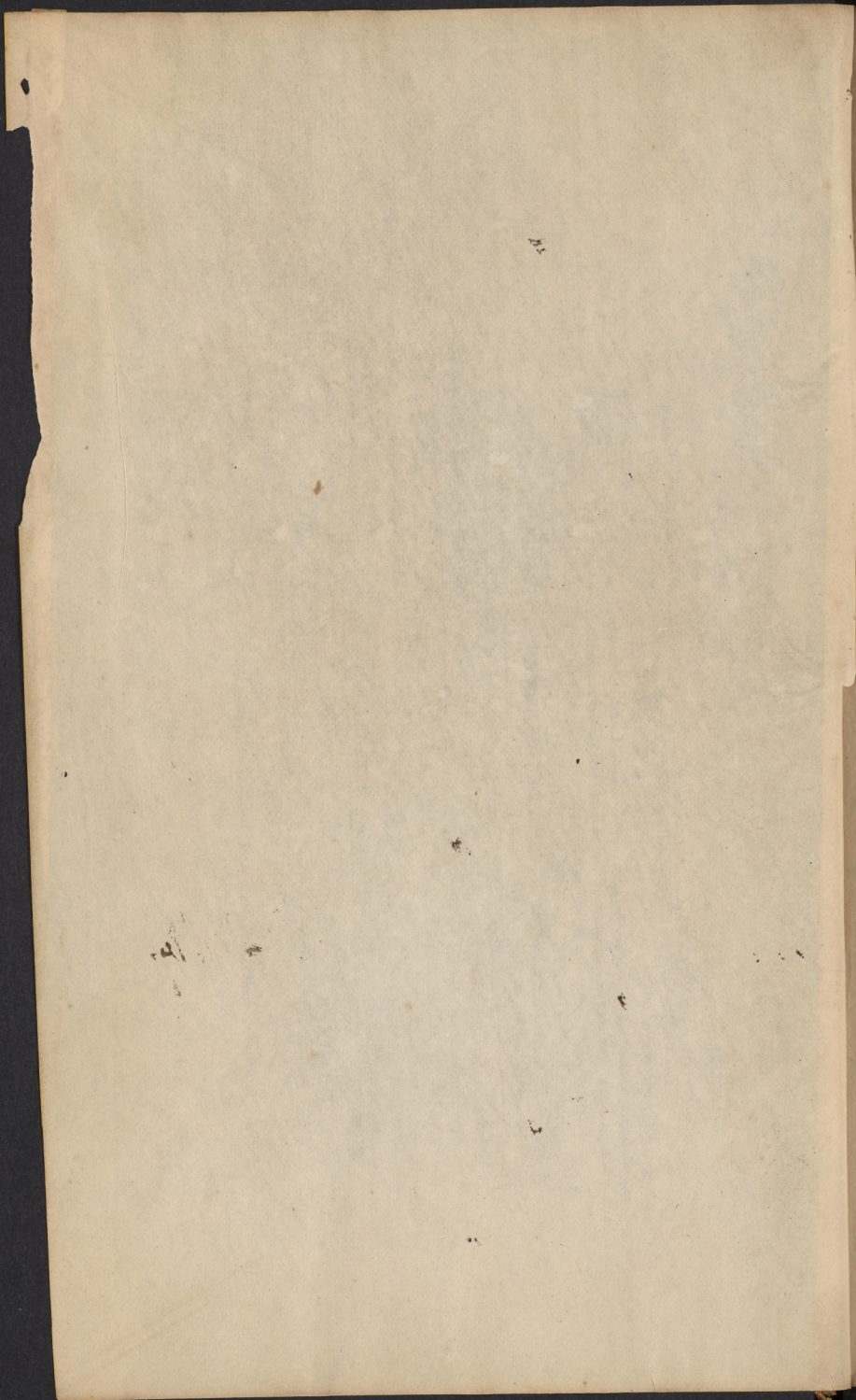
in the

University of Pennsylvania

1837

Vol. 2







Notes -

on

Materia Medica & Pharmacy

delivered

by

G B Wood

— in the —

University of Pennsylvania -

— 1839 —

— Vol 2 —



Notes -

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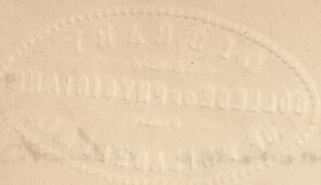


## — Tonics —

These are medicines which produce a gentle and permanent excitement of all the vital actions; though their influence is more observable in the functions of organic life than those of animal life. —

They differ from astringents in the more general diffusion of their action, & in the want of any especial direction to the organic contractility —

They are more directed to the <sup>nerve system</sup> ~~organic contractility~~ — than astringents.



Review —

There are many instances of  
persons a great number of  
persons are taken out of  
all the vital actions; though  
their life seems to have been  
lost in the function of  
the organs of the body.  
—

They differ from autopsies  
in the more general  
loss of their action, & in the  
want of any external  
action in the organic system.

It is  
There are many instances of  
persons a great number of  
persons are taken out of  
all the vital actions; though  
their life seems to have been  
lost in the function of  
the organs of the body.  
—



2

They have been called ton-  
ic - in consequence of the  
impression that they increa-  
sed the tone or tension of  
the muscular fibre. But this  
explanation is too mechan-  
ical. Tone or tension is sup-  
posed to be identical with  
force or power, which is <sup>one of the</sup> an  
effect, not a cause & depends  
upon the activity of the  
organic movements. The  
tone of the system generally  
is not to be gauged by the  
exertion of muscular strength.  
as this may depend upon  
inordinate excitement, as  
in the case of maniacs,  
& may far exceed the ton-  
ic condition of the system.

They have been called the  
in the correspondence of the  
information that the  
and the two in terms of  
the movement as follows, but the  
capacitation to the mechanical  
local. There is tension to up-  
posed to the identical  
force or power, which is an  
effect of a certain & depends  
upon the nature of the  
organism movement. The  
time of the system generally  
is the period of the  
action of the mechanical system  
in the body depends upon  
the nature of the action, and  
in the case of movement,  
they are caused the in  
the condition of the system.



They increase on the contrary all the vital functions. They have been denominated Roborants, but an objection arises to this term from the fact that perfect health cannot be improved, hence under all circumstances they are not roborant, but under some circumstances may even become sedative. —

Nor are they strictly entitled to the name of permanent stimulents as by long continued use the excitability of the part or the whole system may be exhausted, and be followed by subsequent depression.

3  
The measure in the  
they also the total  
They have been  
injected the but  
an objecting answer  
from the fact that  
perfect health cannot be  
inferred, these words  
consequently they are not  
labor, but when  
circumstances may even  
become active.  
There are the strict  
to the name of form  
stirred as if they  
there is the  
of the fact in the  
then they the  
and the following  
great depression.



In this respect there is some-  
analogy between tonics &  
diffusible stimuli. In the-  
case of diffusible stimuli,  
the subsequent collapse is  
proportional to the amount  
of stimulation, but in  
the case of tonics, as they  
operate slowly, their impres-  
sion is more durable &  
there is less opportunity for  
depression, yet in the healthy  
state the excitement pro-  
duced by them may be  
followed by this depression.  
Tonics therefore are injurious  
if given in the healthy state  
or in diseases of excite-  
ment. —

They do harm in two ways.





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1- by inducing an irritation  
which may result in -  
inflammation

2- by diminishing excitability -  
or natural healthy power.

The effects of their misuse  
are displayed in the pro-  
duction of dyspepsia, inflam-  
mation of the stomach, chro-  
nic derangement of the visce-  
ra & the sequelae dropsy -  
cohesion &c. which if they  
are improperly given or too  
long exhibited will be in-  
duced. These effects may be  
illustrated by the history  
of the Portland powder, which  
at one time was in high  
repute in the cure of gout.

1- By inducing an irritation  
which may result in -  
inflammation  
2- By diminishing vitality  
in matter of healthy growth  
The effect of their medicine  
are displayed in the pro-  
duction of dropsical, inflamed  
irritation of the stomach, and  
all derangement of the liver  
and the neglected dropsy -  
Colic, &c. &c. which is the  
are supposed given or too -  
long exhibited with the in-  
crease. These effects may be  
illustrated by the history  
of the Portland powder which  
at one time was in high  
repute in the case of post-



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which was effected by concentrating irritation in the stomach & bowels - & the subsequent destruction of the patient.

Tonics are indicated in those cases where the vital actions are depressed below the standard of health, or in other words in cases of debility.

They ~~also produce~~ <sup>produce</sup> and increase of action, if the excitability has not been materially impaired, and may sustain the system, <sup>even</sup> while the cause of debility exists - or continues, until in the course of time it is removed by the curative process, as -

illustration a stranded ship. -



7  
in the case of suppuration  
from an abscess + Erysipelas +  
sloughing, small pox &c.

If however the cause cannot  
not be removed, as in the  
case of open cancer, then  
continued use of tonics will  
augment the debility, by ex-  
hausting the excitability of  
the system + adding to the  
effect of the discharge. —

If the excitability be lost it  
is impossible to restore it and  
tonics are of no service. —

They are employed in some  
stages of acute disease, as  
typhus fever, hemorrhages  
&c in which they sustain  
the system at large until  
the acute affection accompanys





them is removed.

They are useful in convalescence from acute disease. —

In Neuralgia. —

Debility of the digestive organs. —

Tonics invigorate the system in two ways —

1- By increasing the energy of the stomach & digestive power — augmenting the appetite & nutritive process — and thereby <sup>enabling more</sup> ~~permanently~~ <sup>feeding up the</sup> ~~blood vessels~~ <sup>to be thrown</sup> ~~into the system~~ <sup>into the system</sup> ~~which~~ <sup>is</sup> ~~carried to other parts of~~ <sup>the system</sup>

2- By means of nervous communication, or through the medium of the blood vessels, extending their influence over the whole —

them is removed.  
 They are useful in various cases.  
 from acute diseases.  
 The remedy is -  
 bolus of the digestive organs.  
 The remedy purgates the system.  
 in the brain -  
 for increasing the supply  
 the stomach & digestive  
 power - representing the  
 appetite & nutritive process.  
 as a direct method of  
 increasing the supply  
 of the nutritive  
 into the system.  
 the nutritive  
 the nutritive  
 2-10/12 means of human body  
 nutritive action in the system  
 the nutrition of the brain  
 nutritive action there in  
 means over the whole



9  
frame & increasing the activity of the remote organs - independently of the quantity of the blood. -

That they enter the blood vessels - is proved by the bitterness of the flesh of cattle which are fed upon some articles possessing this property.

Tonics differ among themselves - as regards their stimulating power. - and in the possession of peculiar properties. They may be divided into -

Pure Bitters. -

Bitters peculiar in property -  
Aromatics -

Mineral Tonics -

### 1 - Pure Bitters

Bitterness would seem to be

1. The Bitter

Mineral Water

It contains

Bitter Acid in solution

of the Bitter

They may be directed into

the use of medicinal purposes

however, and in the process

in regard to their medicinal

properties differ among themselves

in the most

of the most

the head of cattle which are

in power of the bitterness

that they enter the circulation

of the blood.

of the blood of the patient

of the blood of the patient



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a quality possessed by all vegetable tonics. — It was — at one time supposed by — Cullen that bitterness was inseparable from tonic power and to reside in some peculiar principle. But in opposition to this idea it may be stated that the Mineral tonics are not bitter, and there are some vegetable substances which in a high degree possess this sensible quality and which nevertheless are not tonic in their action upon the economy. Such are colocyath, Nuxvomica, Struthium and Buxia, when given in the ordinary doses. These





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However may be tonic in reduced doses. — and as bitterness is so common and attendant upon tonic properties it may be that the shape and arrangement of the particles which communicates this taste to the tongue is calculated to produce the tonic impression upon the stomach. Hence those bitter substances which are not tonic may have the same arrangement and shape of the particles but it may be so associated with other principles or properties as to enable them to act with energy upon the system in a





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way so different from the tonic action as to conceal it. —

In their effects the pure bitters are closely allied. —

They do not stimulate the vascular system to the same extent as others — but produce a local effect on the stomach. — without any immediate operation on the nervous system. — In large doses — may purge or vomit. —

Bitters peculiar in their properties

These may be peculiar from something inherent in their constitution, as for instance the Peruvian Bark.

from so different from the  
time and as a consequence

—

the time of the year is

now and before, and

they are not the same

now and as before & the same

without an other effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in

the same effect in



13  
or inconsequence of having -  
some other principle asso -  
ciated with the bitter prin -  
ciple, as in scopularia -  
volatilis oil. - or in Pennas-  
burgiana a principle which  
with water yields prussic acid.  
This division in general -  
is more stimulating than  
the pure bitters.

#### Aromatics

These depend for their pe -  
culiarity upon volatile oil.  
They are stimulating in -  
their action & resemble the  
diffusible stimulants.

#### Mineral tonics

These have nothing in com -  
mon but tonic property. -  
Each having decided dis -  
tinguishing peculiarities. -

in the management of the  
house other principles are -  
interior with the other part  
right, as in the apartment -  
located in the house.  
organization a principle that  
interior with the other part  
This division is general -  
in the other apartment than  
the first floor.

Interior

These depend on the  
character of the apartment  
They are determined by -  
their action & location in  
different apartments.

General

These are determined by the  
character of the apartment  
Each having decided the  
determining factor.



Quassia

The wood of the Quassia - Amara - a small tree - a native of Surinam. & the Q. axelba a native of Jamaica. —

That of the first named plant was first introduced. but the supply is now from the last mentioned which is a larger tree & is called Jamaica ash.

The wood is brought in billets of various sizes, having a smooth bark of a darker color on the trunk than on the branches. The wood only is officinal, it is light and porous, without any distinction between the heart wood & sap wood. It is of a light -

It is found in the shape-  
in the form of chips or  
sawed.



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yellow color. It is devoid of  
smell & the taste is bitter  
and permanent.

The principle to which it owes  
its bitterness & active quali-  
ties is termed Quassin. It  
can be obtained by evaporat-  
ing the infusion. But is mix-  
ed with other ingredients.

Quassia imparts its virtues to  
alcohol & water, forming yel-  
low solutions.

The infusion or Tincture forms  
precipitates with the acetate  
of Lead & Nitrate of Silver.

The reaction with the above  
mentioned substances is  
slow & they may therefore be  
used together.

### Medical properties

Quassia improves the appe-





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life & gives tone to the system generally - but does not excite the heart and arteries. —

Mr Rolander a Swede, acquired a knowledge of this article from a black by the name of Quassi, who a resident of Surinam, this black was in the practice of treating Malignant fever with it & sold his secret to Mr Rolander. —

It at one time had great reports in Europe, at the time physicians were looking for a substitute for Peruvian bark. & was employed in the treatment of Intermittent fevers. —

It is stated to be antiseptic

It is stated to be antipathetic  
to the treatment of Intercostal  
fever. & has exhibited in  
a substituted for Opium and  
for Opium and Opium for  
at the same time has great  
effects in Europe, at the same  
time. —

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to the treatment of Intercostal  
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to the treatment of Intercostal  
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a substituted for Opium and  
for Opium and Opium for  
at the same time has great  
effects in Europe, at the same  
time. —



as flesh can be kept for  
a considerable length of  
time in an infusion of  
it.

It has no antiparasomal  
character & is now used  
merely as a bitter tonic in  
states of debility - as for in-  
stances that accompanying  
convalescence, where there ex-  
ist want of appetite, night-  
sweats - restlessness - muscu-  
lar debility &c. -

In dysentery it is admin-  
istered to remove the de-  
bitated condition of the  
bowels, but not before all  
traces of inflammation have  
subsided.

But it is most useful in-

and the same can be applied to  
a considerable number of  
things in our experience of  
life.

It is the principle of sympathy  
which is the basis of all  
moral action, as a better  
state of belief - as for in-  
stances that accompany  
moral action, which there is  
a sort of sympathy, right  
sympathy - sympathy - sympathy.  
The object of it.

The object of it is to  
interest to remove the ob-  
stacles to the realization of the  
world, that that is all  
the need of life is to be  
achieved.  
But it is the most perfect in



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the weakened condition of  
the stomach attendant  
upon dyspepsia, in atonic  
gout & chlorosis, where the  
stomach is in a languish-  
ing condition,

Dose of the powder 20 grs - to 60 -  
The infusion is made in the  
proportion of ℥ij - to ℥j of cold  
water dose ℥ij - 3 or 4 t d. -

Extract a powerful bitter -  
dose - 2 - 5 grs - -

May be combined with  
the purgatives. -

Tincture - of a light green -  
yellow - dose - ℥i to ℥ij -

Simaruba bark

obtained from the Quav-  
sia Simaruba, a tree found  
in Jamaica, called the -

The first part of the  
the second part of the  
the third part of the  
the fourth part of the  
the fifth part of the  
the sixth part of the  
the seventh part of the  
the eighth part of the  
the ninth part of the  
the tenth part of the  
the eleventh part of the  
the twelfth part of the  
the thirteenth part of the  
the fourteenth part of the  
the fifteenth part of the  
the sixteenth part of the  
the seventeenth part of the  
the eighteenth part of the  
the nineteenth part of the  
the twentieth part of the  
the twenty-first part of the  
the twenty-second part of the  
the twenty-third part of the  
the twenty-fourth part of the  
the twenty-fifth part of the  
the twenty-sixth part of the  
the twenty-seventh part of the  
the twenty-eighth part of the  
the twenty-ninth part of the  
the thirtieth part of the



flowering ash.

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This bark is in folded pieces - which are firm, stringy and tenaceous. - It has a bitter taste & imparts its virtues to alcohol & water. -

Coptis trifoliata, Coptis - Golden Thread - Root of the plant. -

Locality, character of the plant. -

Description of the root. -

Mild tonic in its properties and used as such. -

Also as a gargle to the aphthous sore mouth of children. -

Gentiana L.

Gentian. -

The root of the Gentiana lutea & G. purpurea. The first a native of Switzerland &

Flowering stalk.

This stalk is the folded form -  
which are forming strongly and -  
tendrils. It has a bitter -  
taste & imparts its virtues to -  
collected matter. -

Bostrychia cristata (L.) -

Pilaeolus - Part of the -

plant. -

Bostrychia character of the -

plant. -

Bostrychia of the east. -

Bostrychia has its properties -

and used as such. -

Also as a remedy to the system -

are (Bostrychia) of children. -

Bostrychia (L.) -

Bostrychia. -

The part of the Bostrychia (L.) -

test & purposes. The part -

is Bostrychia of Bostrychia (L.) -



the other of Germany.

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These plants are herbaceous and perennial &c.

The root comes in pieces of various sizes - wrinkled & contorted, of a brown color externally & yellow within. It is soft & spongy.

Smell feeble. —

Taste intensely bitter, and somewhat sweet in consequence of the sugar it contains.

The powder is yellowish brown. —

The menstrua are alcohol & water. —

The proximate active principle is gentianin which is neither acid nor alkaline. — with Acetate of lead a precipitate is formed.

Gentian is a powerful tonic.





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and is used as the basis of  
a variety of tonic medi-  
cines. —

It enters into the composition  
of the celebrated Portland  
powder, at one time in use  
for the cure of gout. —

Powder — gr 10 to 40 —

Infusion — ℥ss to ℥j — ℥ij —

Compound infusion — officinat. —

Tincture — ℥i to ℥ij — useful  
in the case of drunkards —  
as an adjuvant to purga-  
tives. —

Extract dose 5 to 20-gr —

May be combined with  
mineral tonics and laxa-  
tives. —

### Erythraea centaurium

Lesser centaury. Character-  
uses — Made of caliche. —

new - made of cut stones -  
better center, the center -  
Cytherea centronia

Atten. -

the center of the center -  
Many the center of the center -

Center of the center -

the center of the center -

the center of the center -

the center of the center -

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the center of the center -



Sabattia angulans - Sabattia

American centaur -

The whole plant is used. -

Characters. - Locality. -

Sensible properties -

Given in cold infusions -

$\frac{3}{4}$  to  $\frac{1}{2}$  - dose -  $\frac{3}{4}$ ij

Colomba

Colombo root -

obtained from the Coccoloba palmatus. A twining plant - vine like in form, with a large palmated leaf & fasciculated root, dark colored externally, yellow internally. -

Its native country is the coast of Africa along the Mozambique channel, whence it was taken to Ceylon by the Portuguese, & to the ports -





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of India — whence it is brought  
to this country. —

It occurs in commerce in  
pieces of various sizes — usu-  
ally formed of transverse —  
segments — flat upon the up-  
per and under surface —  
consisting of cortical & medul-  
lary matter — the latter de-  
pressed — marked by concen-  
tric & radiating striae. The  
epidermis is blackish, the  
internal substance greenish-  
yellow. Friable & easily pulver-  
ized & apt to be worm eaten.

It possesses some odor which  
is attributable to a volatile  
oil. — Taste bitter. —

The powder is greenish yellow  
darken by age.

Its virtues are imparted to

The section are important to

order of age.

The position is given in the

note below.

as indicated to the

position of the

aged to the

yellow, treated to

interior of the

of the

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alcohol & water. -

The peculiar principle which exists in it is termed Colonyrin, it appears to be the best principle -

It also contains Starch, <sup>a little</sup> Mucilage & volatile oil.

The Mucilage & starch will afford precipitates with the Acetate of Lead, and the starch with iodine.

Its introduction into practice is due to Dr Percival, as a bitter it is unstimulating & mild in operation, generally grateful to the stomach.

It is well adapted to cases of hectic fever from local irritation of the lungs, as it is not apt to hurry the circulation, & produce distress -





or embarrassment of the <sup>25</sup> -  
act of respiration. -

It is used in cases of dyspep-  
sia with <sup>algid</sup> gastralgia where  
there are pain, uneasiness &  
oppression of the stomach, dis-  
tention, white flabby tongue -  
loss of appetite, difficult diges-  
tion - disordered bowels &c.

It may be given in com-  
bination with other tonics -  
with purgatives - aromatics -  
& antacids. -

May be used in powder, dose  
℥ss to 3℥ss. -

Infusion - this should be made  
with cold water macerating  
℥i in ℥j - for twenty four hours.  
in this case it is clear & free  
from starch, which would  
be dissolved by hot water. -

(Comp. Infusion)

Rx - Colubus -  $\frac{3}{4}$  -

Ginger -  $\frac{3}{4}$  -

Senna -  $\frac{3}{4}$  -

Aq -  $\frac{1}{2}$  -

M. a wineglassful 3 times a day -



26  
and render the solution  
cloudy & turbid, it is also  
liable to spoil by keeping - from  
the starch. -

The tincture may be given -  
in doses of ℥i to 3℥ -

*Fraxera Walteri* -

False Colombo -

Character of the root & differ-  
ences. -

Little used -

Tonic with properties. -

and received the following  
letter from the  
little of which I have  
tried to give a  
the following  
The following  
the case of  
Francis  
John  
Presentation of the  
case  
little book  
Francis



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Bitters of peculiar powers—

These may be divided—

- 1- Those containing a peculiar alkaline principle as Peruvian Bark. —
- 2- Where the bitter principle is combined with a sedative principle. as Cott-  
Prun. virginiana
- 3- Where the bitter principle is associated with a stimulant one, usually volatile oil — as Serpentaria. —

---

Cinchona L. —

Peruvian Bark,

Derived from a number of the species of Cinchona which are inhabitants of South America.

Position of political power

These may be divided

1. Those containing a

political element

for an American

2. When the latter principle

is combined with a

other principle, as

Principle of

3. When the latter principle

is combined with a

third principle, as

in the case of

the

the

the

the

the

the



28  
ica. — They grow along the range of the Andes in an elevated situation. Their range is between 20° South & 11° North. The altitude from 1200 to 10,000 feet.

There are 15 or 16 species of the true cinchonas described.

But as the reference to the species of the varieties of commercial bark cannot be depended on, as especially the classification of the British Colleges is incorrect, I shall describe but one species —

Description of the <sup>C.</sup> lanceifolia  
& C. condaminata.

There are five localities whence

There are five localities where

the same species

are found

species -

At the same time

not the same

the classification of the

species is

the same

view of the

But on the

best

the same

There are

fact.

At the same

South & 11

There are

are

range of the

the same



obtained —

- 1- In the northern part of Peru — near Loxa, in the ancient province of Iusto.
- 2- In the province of New-Granada — many leagues to the north of Loxa — in the neighborhood of St. Fee de Bogata. Whence taken to Cartagena —
- 3- To the south of Loxa in the neighborhood of Temarico — Taken to Lima. —
- 4- Near Lapaz — or La Paz in Bolivia. Here are the Caliseya Forests. —
- 5- In Columbia near to St. Matthias — whence also, taken to Cartagena.

A botanical classification of the barks is impracticable —





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He & one founded upon the localities - is also difficult - as several varieties may come from the same place.

From the localities which - have been given they may be divided into Peruvian & Carthagena barks - The former alone are official.

In accordance with their sensible & chemical properties, they may be divided into - Pale - yellow - & red barks -

Cinchona pallida

In commerce two varieties are designated by this term - that from Loxa or crown-bark, that from Pluamco - or Lima bark - some -

the time from that point the  
localities is also different -  
as several sections may come  
from the same place. &  
from the localities which  
have been given the map -  
the divided list given -  
near to Carthage, Ark -  
the names alone are given.  
Well.

The names given with their  
descriptions for several propo-  
sitions, they may be divided  
into Old, Yellow & Red  
beds -

Black sand fossils  
The commonest the section are  
designated of the lower  
that from beds or lower  
beds, that from the  
or a kind of bed -



times called silver gray -

Pale bark occurs in quills singly or doubly rolled, of various lengths - two lines to an inch in diameter - half a line to two or three in thickness - Exterior surface rough, - marked with fissures - & sometimes covered with lichens - of a gray color, or white & shining - The interior surface is smooth & velvety - of a dull orange color. Fracture short and fibrous. -

Color of the powder pale fawn.

The odor is tan like -

The taste astringent & bitter - less bitter than the other varieties. -

The Loxa bark is the finest obtained from the small





branches. —

32  
Compared with the others this kind processes less value as it contains little quina. The proportion of cinchonina is much greater. It has less febrifuge power. —

Cinchona flava

The bark under this name which I shall describe is Callisaya. Called Royal yellow.

It occurs under two forms — Flat & quilled pieces —

The quills are doubly or singly rolled, 3 or 4 inches to a foot in length — 2 or more inches in diameter. Epidermis of a brownish color — diversified by <sup>lichen</sup> ~~patches~~ & marked by transverse fissures, which allow the separation

Comparison with the other two -  
Kind previous has been  
an et cetera better specimen  
The properties of this  
is much greater. It has been  
for some time -

Chlorophyll  
The first under the name  
which I shall describe is -  
Chlorophyll (Chlorophyll)  
Color

It occurs under the form  
of a green powder -  
The color is dark green  
of which, 3 or 4 inches of  
a foot in length - 2 or 3 inches

Powder yellow.

One of the most common  
characteristics of this  
kind of specimen is  
which also the specimen



of the epidermis —  
 Structure fibrous, & presents —  
 shining points — Color yel-  
low inclining to orange-  
 odor tan like —

Taste very bitter & less astun-  
 gent than the pale. —

Epidermis insect therefore —  
 it should be removed.

The flat pieces — from the —  
 trunk — destitute of epi-  
 dermis — various sizes — coar-  
 ser than the galls — in —  
 other respects analogous. —

It is more valuable be-  
 cause the epidermis has —  
 been removed. —

Contains a larger amount —  
 of quinine than cinchona —  
 & it is therefore used in —  
 the manufacture of this article.





Cinchona rubra

of a deep red color. It occurs in quills & flat pieces—

Character of the quills?

Character of the flat pieces?

Always covered with the epidermis which is of a brown color & sometimes tuberculated.

Taste astringent & bitter—

Contains equal proportions of Quinia & Cinchonine.—

Non officinal or Barthrogena Barks

These are characterized by having a light epidermis— are spongy in structure, comminuted & possess a more nauseous and disagreeable taste.

Characteristics of the

of a deep sea fish. It is  
seen in Florida & West Ind-  
ies

Character of the gills  
Character of the pectoral fins  
Always associated with the op-  
erous which is of a small  
color & sometimes trans-  
lucent

Taste subsequent & other  
Character of opercular protrusion  
Stomach & digestion

How offensive or defensive  
to the fish

There are characteristics  
of having a light operculum  
There are opercles in other  
fish, characteristics & pro-  
trusion of the operculum  
Stomach & digestion



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They are divisible into pale & yellow & red. —

They contain equal quantities of Cinchonia & Quinia but in less amount.

### Chemical composition —

They contain two principles — Quinia & Cinchonia — combined with Benic acid.

#### Quinia

This is a white porous — pulverulent substance — bitter — bitter taste, fusible like the resins & unites with the acids to form salts. —

How obtained —

#### Cinchonia

White crystalline substance, less soluble than Quinia, less bitter, neutralizes the acids —

How obtained.

+ If these two ~~boxes~~ <sup>glirya</sup> is most as-  
 tive.



36

Differences between it and  
Quinia. —

The incompatibles are astrin-  
gents - alkalies & alkaline -  
earths - & salts of the metals -  
Insoluble salts are formed -  
between these bases & tar-  
taric, oxalic & gallic acids. —

Medical properties & applica-  
tion —

Its knowledge derived from  
the Indians —

Introduced in 1840 — by the  
Count of Cinchon —

Escuinte Bark

Countess powdered. —

Used by Sir John Lubbock. —  
in the case of the Dauphin -  
of France. —

Active principles - I & C. +

~~The quinine is not a tonic~~  
In small doses it acts upon

x  
# produce silently & slowly a -  
tonic impression -

# producing oppression, weight  
and heaviness in the epigas-  
trum. these effects however are  
obviated by employing the pro-  
imate principles or their com-  
pounds.



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upon the stomach, invigo-  
rating digestion. —

In large doses — disorder  
the stomach & may cause  
nausea or produce constipation.

In <sup>full</sup> ~~large~~ doses act upon  
the system generally — in-  
vigorates it, quicken the cir-  
culations — increase the  
animal temperature &  
affect the nervous system —  
almost inducing a fe-  
brile paroxysm. —

The symptoms arising from  
the specific action upon the  
nervous system, are buzzing  
in the ears — ringing sensation.  
Blindness — tightness of the  
forehead, head ache &c.

By the oppression induced  
by this over effect a state —  
the opposite of tonic may —





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exist, or it may have a  
sedative influence.

Most commonly the stomach  
suffers from the inordinate  
action of the medicine locally.

Beside its tonic impression -  
bark has an effect which  
is different from this, and  
peculiar in character, viz  
its power of counteracting pe-  
riodical or paroxysmal dis-  
ease, which may be termed  
its antiparoxysmal power or  
its anti intermittent property.  
It would therefore seem to  
possess two properties, -

I do not wish to be under-  
stood to say that these two  
effects are distinct and in-  
dependents of each other, but  
I mean that while the





39

Medicine is producing the tonic effect, it is at the same time working upon the system in such a way as to counteract the recurrence of paroxysmal disease, the one being intimately associated with the other and included within it.

On account of this second mode of operation it is employed for the cure of Intermittent Fever

Prior to the discovery of bark this was a much more fatal disease, so much so indeed that a quartan ague was as much feared as the plague - and as fatal as consumption. It is now regarded as a controllable affection.

34  
The question is, how far  
this effect is at the  
same time working upon the  
system in such a way as  
to counteract the bene-  
ficial of previous action. This  
case, the more being internal  
of associated with the other  
and included within it.  
The account of this disease  
is a record of operations in -  
discharge for the sake of  
Intermittent Fever  
Prior to the discovery of this  
there was a Malarial fever for  
the disease, or Malarial as it  
was, that a greater effect  
was on Malarial fever on the  
phases - and on fatal in-  
flammation. It is now regar-  
ded as a controllable effect.



the exhibition of bark being-  
looked upon as specific. —

In Malignant Intermittent  
the danger is lessened in-  
proportion to the possibility of-  
vigorously introducing the-  
remedy and bringing the-  
system under its influence,  
by getting the patient to take  
enough to <sup>prevent</sup> ~~bring~~ a recur-  
rence of the paroxysm.

Without entering into the mode-  
of treating the disease. I shall  
merely state that it is proper  
to evacuate the stomach and  
bowels, by means of an emet-  
ic or purgative, (calomel if  
the liver be deranged) and  
then without delay commen-  
cing the exhibition of the  
medicine.

the exhibition of that day  
I have seen an exhibit  
The most important  
The danger is however in  
proportion to the number of  
exhibitors entering the  
exhibition and turning the  
system under its influence  
by getting the patent to take  
control of the <sup>patent</sup> system  
some of the provisions  
without entering into the merits  
of treating the classes of  
exhibitors that it is  
to create the utmost  
bound by means of all sorts  
of regulations, (exclusion of  
the fair the changed) and  
the most delay even  
even the exhibition of the  
exhibition.



41

A question has arisen, whether  
Bark ought to be given du-  
ring the existence of visceral  
disease & whether this ought  
not to be removed before  
an attempt is made to pre-  
vent the accession of the par-  
oxysm. —

But I am of opinion deci-  
dedly, the return of the par-  
oxysm under these circum-  
stances should be preven-  
ted, as the visceral conges-  
tions &c are the effect and  
not the ~~cause~~ <sup>cause</sup> of the dis-  
ease & that they are liable  
to aggravation by every new  
paroxysm, and there is greater  
danger of secondary affection  
as ague cake, chronic in-  
flammation of the liver, jaund





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Alc& dropsy &c than where  
the disease has been arrested.

Where high local inflammation exists, with attendant violent excitement, the treatment must be modified to suit the case, here however it is not the visceral disease which proves an obstacle, but the condition of the system which contraindicates bark.

Formerly the affections mentioned were attributed to the use of bark, hence the vulgar prejudice, the root & all against it; but physicians are beginning to find that this is erroneous & the populace are less apprehensive of such consequences.

The skin however should be cool, pulse may be active but feeble & no inflammation of the stomach should exist. In this disease there may turn out fæction & ulceration of the follicles with diminution of recuperative power. —

### Typhus Fever

Without excitement but purely nervous — Bark & valerian — may be used in combination. —



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Bark is employed also in Re-  
mittent Fever, where there is  
a sufficient intermission or  
such a remission as to allow  
its use.

Also in typhoid fever with a  
decided protracted condition,  
& where especially the disease  
can be traced to miasmata.

In Intermittent Neuralgia.

In ophthalmia having a deci-  
ded intermittent form, that  
is to say, the paroxysmal oc-  
currence of vascularity, conges-  
tion redness & pain.

Periodical headache, especially  
hemioral

Epilepsy & various anomalous  
intermittent affections,

Gout & rheumatism under some

\* As in the latter stages, after ac-  
tive treatment.

Even in some cases where there  
is local inflammation, with  
prostration of the system - as -  
in Erysipelas, Small Pox, Typhus-  
Pneumonia &c.

In debility from convalescence -

Beside this other substances which  
could establish a distinct irri-  
tation would be equally service-  
able in the cure of the disease.



Circumstances. \*

### Theories

There are several modes of explaining the operation of bark, in Intermittent Fever.

1- Intermittent Fever is maintained to depend upon a periodical gastritis, which comes and goes with the paroxysm. Now bark is stated to set up a distinct irritation which is peculiar in its character & therefore displaces the inflammatory tendency by occupying its place.

But as the effect of bark is that of an irritant, it ought under these circumstances rather to provoke the return of the Gastritis, and a consequent return & aggravation

This image shows a blank, aged, cream-colored page, likely an endpaper or flyleaf of a book. The paper has a slightly textured appearance with some minor discoloration and a dark, irregular horizontal band near the bottom edge, possibly due to the binding or the scanning process. There is no text or other markings on the page.



of the disease.

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12-It is stated to produce its effect by acting upon the capillaries of the different organs, (as for instance the skin & muscular tissue) an impression in the first instance being made upon the stomach which is transmitted to them. In this way the activity of the circulation is aroused and the blood prevented from being determined to the internal viscera - occasioning the phenomena of the disease.

Here again this explanation is objectionable from the fact, that the bark would produce an irritating action upon the stomach which as a focus would attract the blood to the central organs.

of the disease.  
It is stated to produce  
the effect of acting upon the  
capillaries of the different or-  
gans for instance the lungs  
& mucous (tubes) and in-  
crease in the first instance  
being made from the uterine  
which is transmitted to them.  
In this way the extent of the  
circulation is increased and  
the blood prevented from  
being determined to the in-  
ternal vessels occurring the  
phenomena of the disease.  
There again this explanation  
is repeated from the  
fact that the body much  
increased in circulating action  
upon the stomach which in-  
creased would affect the  
blood to the extent of again



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My idea of the modus operandi is the following. That the disease has its seat in the nervous system & that bark effects a cure by its specific direction to this system - breaking up and displacing the morbid associations which constitute the affection, & eradicating it by changing the actions of this system.

Beside the diseases enumerated bark may be advantageously employed in gangrene, in ulcers indisposed to heal on account of general loss of tone. —

In dysentery of miasmatic origin. —

In Passive hemorrhages —





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In Dyspepsia accompanied with  
activity of the stomach, Bark-  
is not as beneficial as the  
milder tonic, & must be  
employed with caution least  
there should exist some  
irritation which the medicine  
may aggravate.

#### Mode of exhibition

The powder is the most ac-  
tive form in which Bark-  
can be administered. -

In some cases however it is  
difficult to take, and can-  
not be retained upon the  
stomach, when other forms  
must be employed. -

It should never be em-  
ployed purely as a tonic  
in substances, but only when  
a powerful impression is de-

a powerful influence in the  
the education of the people, and  
the highest point as a teacher  
it should never be  
must be explained.  
stomach, when the  
that the retained  
difficult to take and can  
the same case (however it is  
can be administered  
the first in which  
the powder is the first  
Nucleus of exhibition  
they appear to



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sired to be made upon the  
system. In some cases in  
the treatment of intermit-  
tent fever you may not  
succeed with Sulphate of Qui-  
nia, when the bark must be  
employed.

Occasionally in order to make  
it remain upon the stomach  
it becomes necessary to combine  
it with aromatics, and its  
power is increased by an  
union with opium.

The dose is ℥i—repeated every-  
hour in the interval of  
the paroxysms that ℥i sh-  
be taken. The Calissaya is  
to be preferred.

The best vehicle is water &  
the whole quantity should  
be mixed in a bottle.





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wine was formerly employed as a vehicle - but it is objectionable. -

If it purges it may be combined with opium & if it constipates with rhubarb.

Occasionally it has been employed externally in the form of quilled jackets. -

Water will not extract all the active properties of the bark.

The Infusion is directed to be prepared in the proportion of  $\text{ʒi}$  - to  $\text{ʒj}$  - of boiling water. - This preparation is turbid & objectionable. - That with cold water is a more elegant preparation. Elis vitriol may be added. Rationale. -

Decoction made in the same proportions - & boiled 10 minutes - objection same - Dose  $\text{ʒij}$  -





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The Tincture is a strong preparation of the bark - It is used to give additional tonic power to bitter infusions.

The Compound Tincture or -  
Kuxham's Tincture contains  
Bark - orange Peel - Serpentina -  
red Saunders & affron. - in  
diluted Alcohol. Dose 3i-3j -

The Extract prepared from -  
the tincture & decoction -  
Dose 10 to 30 grs -

---

Sulphate of Quinia -  
One of the most valuable medicines  
afforded by the successful  
application of pharmaceutical  
chemistry.

It is prepared by boiling crass-  
ty powdered Calisaya bark -  
in diluted sulphuric acid -  
Drawing of the solution - ad -





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dry powdered lime - separating the precipitate - subjecting to the action of rectified alcohol. - evaporating the alcoholic solution - & redissolving in sulphuric acid diluted, boiling with animal charcoal - crystallizing - Ratinate. -

Its form is that of <sup>small</sup> white fibrous crystals, of a pearly appearance. When exposed to the atmosphere, they effloresce slightly. Taste bitter.

Its composition is 1 atom of sulphuric acid, 2 atoms of quinia with water of crystallization, hence it is a di salt. sometimes it has been called a sub sulphate.

It is very sparingly soluble.





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in water. - Readily soluble -  
alcohol.  
in ~~water~~

It is soluble in water acid-  
ulated with sulphuric acid -  
& give to the solution a  
blueish tint, termed opal-  
descence. In this case it -  
is converted into the neu-  
tral sulphate.

It is sometimes adultera-  
ted by the admixture of  
other matters - as sulph of lime  
starch &c.

Means of detecting adultera-  
tions. \_\_\_\_\_

Sulphate of quinia may be  
used for bark & is now uni-  
versally applied -

It has the advantage of  
being given in smaller bulk.  
of agreeing better with the -





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Stomach & of being admin-  
istered in a more conve-  
nient form. It will produce  
most of the effects of bark -  
but not all & sometimes  
it becomes necessary to  
give the bark. I think that  
when cases are cured by bark  
its self, the cure is most  
likely to be permanent.

4 grains are equivalent to  
an oz of good Bark.

The dose is 1 gr & in Inter-  
mittent disease it is ne-  
cessary to administer from  
12 to 18 grains in the interval.  
It is sometimes essential to  
introduce the medicine rap-  
idly & then larger doses  
are required. But as a  
general rule I prefer the

General note of paper the  
are required. But as a  
field of the paper chosen  
interacts the medicinal  
It is sometimes converted to  
12 to 18 grains in the  
course of administration from  
Medicinal chosen it is  
The dose is 1/2 to 1 in  
of good taste.  
It is also equivalent to  
the preparation.  
Itself, the dose is  
which are caused by  
give the taste. I think that  
it becomes necessary to  
but not all & sometimes  
most of the effect of taste  
present form. It will produce  
interacts in a more or less  
the same & of being retained.



Mode mentioned. —

It may be given in the form of injection — 12 grains at a time in solution, with opium

It may be applied to a thirsted surface — 10 grains — but is liable to the inconvenience of ulcerating the part to which applied.

Given in the form of pills — should be recently prepared, why. —

or in solution. How prepared.

Pure sulphate of Quinia — Made by evaporating the mother waters, after the sulphate has crystallized. — Formerly called the Extract of the Sulphate of quinia

Under the microscope -

It may be given in the form  
of injection - 12 grains at -  
to three or four times daily.

or

It may be applied to a thin  
layer of surface - 10 grains -  
it is liable to the same  
consequence of increasing the  
point to which applied.

Given in the form of pills  
it would be readily prepared.

Why -

It is soluble. How prepared.

Preparation of Liniment

Made by evaporating the  
water, after the oil  
has evaporated.

Formerly called the Liniment  
of the Alphate of Liniment



Appears in the form of a  
Bitter Resinous Extract.

The dose is double that of  
Sulph. Quinia. —

Uses the same —

Sulphate of Cinchonia —

This salt possesses simi-  
lar powers to the preceding,  
but in inferior degree. —

The dose and mode of  
administration is the  
same. —

Caribean Bark —

Derived from the Excostema-  
caribea. It contains tan-  
nin & bitter principle.

Svietenia febrifuga

"

Mahogany

A Esculus Hippocastanum.

Salax

Contains salicine —

Opposed in the form of a  
little reminiscent  
The drive is better than that of  
light. Quinn.  
Even the same

Alphabetic of (Cincinnati)  
This best preserved thing  
has passed to the preceding.  
But in inferior degree.  
The drive and quinn of  
a reminiscent is the  
same.

Carriage and (Back)  
Arrived from the Carriage  
Carried. It contains the  
list of better principles.

Historical (Cincinnati)  
Alphabetic  
A reminiscent of  
the  
Cincinnati



55

All of them inferior to bark -  
Sogwood

The bark of the Cornus Florida.

Description of the Tree -

The bark of the stem and branches is used, but that of the root most frequently employed. -

Description of the bark. Powder reddish gray. - Taste bitter - odor faint

Menstrua. alcohol & water

Contains a bitter principle & Tannin. A principle denominated Cornine announced - Wood thinks questionable!

Used in powder or Decoctura -  
base of powder  $\text{ʒi}$  -

Decoct -  $\text{ʒi}$  to  $\text{ʒj}$  - Wineglassful -  
To cure intermittent Fever. -  
But dose too small to pro -

all of them superior to the

original

The table of the contents

Description of the

The book of the

is arranged in such a way that

of the first part frequently

improved.

Description of the

the book is very good. -

the book is very good. -

contains a little

the book is very good. -

the book is very good. -

the book is very good. -

the book is very good. -

the book is very good. -

the book is very good. -

the book is very good. -



56

duce the effect of Cinchona-

Prunae & Amygdaleae -

Plants which contain a principle termed Amygdalin which by its reaction with water is converted into a volatile oil & Prussic acid. -

To these belong -

Wild cherry tree Bark

derived from Prunus virginiana Ls. - the only officinal species. -

Size of the tree -

How it grows - Native.

How to tell the tree by the bark, peeling circularly. -

Description of the Tree, leaves - flowers, Fruit. -

Part of the tree used is the bark of the root & stem -

Description of the bark & difference between that of the stem & root.

11  
The effect of Quinine -

Quinine and Malaria -

Plants which contain a  
principle termed Quinine  
This which is the active  
with water is converted into  
a volatile oil & Quinine can.

7. These belong -

Wild cherry tree bark

Quinine - from Quinine bark -  
is also the only medicinal  
specimen.

Use of the tree -

From its green - Quinine  
then to tell the truth the

work, feeling curiously -  
Description of the tree, leaves -

Flowers, fruit. -

Part of the tree used is the

Part of the root bark -

Description of the bark & of -  
Quinine between that of the stem  
& root.



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It has the smell of the acid-  
oil. - Taste bitter & aromatic.  
Powder cinnamon color. -  
Components - oil - acid - tannin -  
+ bitter extractive

The Menstrua are Alcohol &  
Water. -

Effects on a Medicine

Mild Tonic with sedative  
powers. - The first impression -  
is made upon the stomach, -  
increasing the appetite; the -  
second is directed to the -  
nervous system, quieting rest-  
lessness & to the arterial low-  
ering the pulse. -

Given in diseases where the  
indications are to invigorate  
the stomach & quiet irritation  
and restlessness, as in Con-  
valescence - Ectic Fever, Scro-  
phula, &c. Much given in -  
Consumption.

It has the smell of the sea  
oil. - Venter luteo-fumens  
Purpureo limbo albo.  
Component - it - acid tannic  
+ luteo catenae  
The characters are black &  
white. -  
Effect on a Medicine  
It is a very bitter medicine  
- The first impression  
is made on the stomach,  
- increasing the appetite, the  
- secret is directed to the  
- human system, giving rest  
- tension & to the exterior in  
- being the pulse. -  
Given in cases where the  
indication is to disperse  
the stomach & first intention  
and restlessness, in the  
- not common - Venter luteo, limbo  
- white, & black gives rise  
- to purging.



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Gwein in powder - 30 grs -  
or Cold Infusion - ℥ij ʒij -  
dose - ℥ij - This is clear and  
of a beautiful wine color.  
The decoction is objectionable -  
Why -

Chamomile - Antthemis lvs -  
The flowers of the Antthemis -  
nobilis - distinct from those  
of Matricaria.

Description of the Plant -

A native of Europe whence -  
imported. - All parts of the -  
plant are active. -

Flower - characters - divisions -  
white & yellow - single and  
double - differences color -  
called Roman chamomile -

Taste bitter & aromatic -  
odor aromatic. -

The single are the strongest.

Given in garden - 1892 -  
The color of the flowers - 1892 -  
One - 3 - This is the same as  
of a beautiful white color.  
The description is as follows -  
The flowers of the plant -  
The leaves - distinct from those  
of the plant.  
Description of the plant -  
The leaves of the plant -  
The flowers - the fruit of the -  
The plant is a tree -  
The leaves - distinct - green -  
The flowers - white & yellow - single and  
double - specimen only -  
The leaves - green and shining -  
The flowers - white & cream -  
The leaves - green -  
The leaves are the strongest

Indigenous -



Water and Alcohol extract  
their virtues, —

It contains bitter extractive  
and volatile oil

It possesses tonic & stimula-  
ting properties —

In large quantity nauseates  
& sometimes purges —

In small doses it is used  
in Dyspepsia & during con-  
valescence or between the  
paroxysms of fever. — It has  
no especial power however in  
Intermittent.

Given in infusion ℥i ℥oj. of  
hot or cold water. as a tonic  
administered cold. —

Warm to assist puking. —

By decoction the oil is driven  
off — The same objection to Extract.

Anthemis cotula —  
Wild or Stinking chamomile

Cured break bone fever.



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Eupatorium perfoliatum.—

Indigenous perennial plant.  
Description of it—

Part used—Stem found in—  
the shops.—

Taste bitter—Bone set.

Alcohol & water the menstrua—  
contains bitter extractive &  
probably oil.—

Acts differently according to—  
circumstances—Tonic—diä-  
phoretic or puke.—

Used to cure Intermittent fever—  
by puking & sweating before the  
paroxysm—Rationale,

Used in Catarrh—& Rheu-  
matism?—How it produ-  
ces a beneficial operation.

Pure Tonic in cold infusion.

Diaphoretic warm infusion—

To puke a large draught.

Geographical position.

The position is determined by the

coordinates of the

point in the plane of the

the plane of the

the plane of the

the plane of the

the plane of the

the plane of the

the plane of the

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Serpentaria. —

Virginia Snake Root. derived  
from the Aristolochia Ser-  
pentaria, & 2 other species —  
tomentosa & thastata

Plant indigenous — charac-  
ters. —

Found and collected in —  
the South & South West. —

Root fibrous — matted — brown —  
having an aromatic cam-  
phoraceous <sup>smelly</sup> ~~taste~~ & an as-  
omatic or camphoraceous bitter-  
taste.

Powder gray. —

Infuses its virtues to water & more  
to alcohol. —

Active principles — (bitter prin-  
ciple & volatile oil).

Adulterated sometimes with —  
root of the Spigelia. —

The Medical properties are —

May act upon the skin & kidneys.



tonic and stimulant, <sup>61</sup>

Mode of operation depends upon the mode of calibration & the quantity.

In large doses it is apt to produce some pain in the head or bowels. —

Useful in Fevers running to the Typhoid form. The first tonic upon which we may venture. Typhus pneumonia. —

Used in powder — gr 10 to 30 —

Infusion — ℥j — 6oj — ℥ij —

Tincture — ℥i —

Employed as an adjuvant to cinchona. —

Secrecion objectionable. —

Worm wood Artemisia ab-  
sinthium —

Tanacetum vulgare, Tansy —  
it supposed to be capable of pro-  
ducing abortion. Dangerous —

Morabium vulgare horseweed —





Myrrh - Myrrha L. - 62

An exudation from the Amry-  
sis - Myrrha, sometimes cal-  
led Balsamodendron Myrrha.

A small tree growing in Sy-  
ria & Arabia. -

Described by Erberbungh. -

In commerce there are two var-  
ieties of Myrrh. India and  
Turkey. Come from the same  
source, but by different routes.

The best is Turkey. - Because it  
is purest &c. It is of a lighter  
color. -

Characters of the gum - In frag-  
ments - or small tears - occa-  
sionally in masses, light brown  
or black (India) Breaks with  
a rough shivering fracture. -  
Pulverisable. Smell aromatic  
Taste bitter





63

It contains gum, resin & volatile oil, besides bitter-principle. —

Alcohol dissolves the resin and volatile oil —

Water dissolves the gum and forms an emulsion. —

Alkalies render it more soluble.

The volatile oil can be procured by distillation.

Myrrh is a stimulant tonic with determination to the lungs & uterus. — It is beneficially employed when the system is properly prepared for its exhibition. But in consequence of its stimulant power can not be employed if the stomach be irritable.

Used in Catarrh where there —





64

is great debility with profuse  
Expectoration, Humoral -  
Amenorrhoea. -

usually given in combina-  
tion with other expectorants.  
& in the last disease with  
iron & aloes in combination.  
Dose of the powder 10 to 30 grs. -  
Pilo -

Emulsion made by rubbing -  
the gum with water.

Tincture - ℥ss to ℥i - used ex-  
ternally to spongy gums - in-  
dolent ulcers - aphthae.

In making Tinctures of the  
gum resins it is requisite -  
to employ rectified alcohol. -  
As the diluted spirit loses its  
spirituous portion & the resin -  
is precipitated, as it is not  
soluble in water.

in great detail with reference  
to the structure of the  
vertebrae, and the  
muscles of the neck  
and back. The  
bones of the  
skull are also  
described, and the  
joints of the  
limbs. The  
system of  
nervation is  
also described,  
and the  
functions of  
the various  
organs of the  
body. The  
book is  
written in a  
clear and  
concise  
manner, and  
is well  
illustrated  
with  
woodcuts.



Angustura —

65

Angustura bark. —

Obtained from the Gallesea-  
officinalis. a small tree-  
growing in South America  
in the neighbourhood of An-  
gustura. —

Bark in small pieces — partially  
quilled, brownish <sup>whitish</sup> externally  
<sup>fawn</sup> ~~whitish~~ internally, edges be-  
velled, fracture short. Smell  
fecble. Taste bitter, & aromatic.  
Contains bitter principle and  
volatile oil —

Menstrua water — it soluble in  
alcohol.

Medical properties —

It is a stimulant and to-  
ic. But may affect the sto-  
mach. used formerly as a  
substitute for Cinchona.





Powder 10 to 30 grs -

Infusion -  $\frac{3j}{\text{ss}}$  - to  $\frac{vj}{\text{ss}}$  -  $\frac{3ij}{\text{ss}}$  -

It -  $\frac{3i}{\text{ss}}$  - to  $\frac{3ij}{\text{ss}}$  -

Falsa Angustura -

Distinctive characters. -

Poisonous - Contains Prussia. -

Cascarilla -

Base of the Croton Eleutheria -  
and C. cascarilla - just from  
the island of Eleutheria - the  
other from the West Indies. -

Small shrubs. -

Two Kinds - 1 - in quills - 2 -  
in curled pieces. Characters of  
each. - Smell aromatic. Taste -  
warm aromatic + Bitter. -  
When burnt exhales a musty-  
like odor.

Powder brown.

Alcohol & water take up the -

October 10 to 20 1890  
Sperling - 3/4 - 1/2 - 3/4  
31 - 1/2 - 3/4

Value of contents -  
Distributive character -  
Distributive - Characteristic

Characteristics  
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and Characteristics - first part  
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Characteristics Characteristics  
Characteristics Characteristics take up the



Active principles. — 67

These are bitter extractive  
and volatile oil.

It is an aromatic tonic —  
which has been used as a  
substitute for Cinchona —  
It is mild in its operations —  
& has been used in dyspepsia —  
used in powder & infusion. —

### Aromatics

These substances have a fragrant  
odor, — and a pungent spicy  
taste. They owe their distin-  
guishing peculiarities to volatile  
oils. —

These oils are called volatile, be-  
cause they diffuse themselves in  
the atmosphere at ordinary  
temperatures. The fluid portions evaporating.  
Called essentials because they  
are supposed to contain the —

action for inspection.  
 There are better substitutes  
 and substitutes oil.  
 It is an accurate thing  
 which has been used as a  
 substitute for the oil.  
 It is used in the operation  
 of the press in the inspection  
 and in the process of refining.

Acetic Acid

There are various kinds of acetic acid  
 and a purer kind of acetic acid  
 is used. They are then distilled  
 and purified by various methods  
 and are then used in the  
 manufacture of various articles  
 and in the preparation of  
 various compounds.



essence or active properties of the substances from which derived. —

Distilled because obtained in this way. —

Properties —

odor is penetrating, diffusible — sweet & agreeable — giving the aromatic type. —

Taste warm pungent & burning — spicy. —

Volatilize at ordinary temperatures & are entirely dissipated by heat.

Boil at various temperatures — some low, some high, but are generally raised at the temperature which vaporizes water. —

Difference between them & fixed oils — founded upon this. —

They are inflammable, generally burn with smoke and are —

Absat aayga.



69

converted into water and  
Carbonic acid. —

Very sparingly soluble in water  
May be rendered more so  
by magnesia — or sugar. —

Soluble in alcohol, which  
constitute Essences —

in Ether & fixed oils. —

They are composed of two sub-  
stances — a solid matter which  
can become concrete — cal-  
led Stearoptene & a fluid-  
substance Elaeptene.

By exposure to the atmosphere  
they become darker colored —  
and heavier. — thicker.

Adulteratives with fixed oils —  
alcohol, — & other oils. —

To detect the first expose to —  
heat upon paper — use water —  
for the second. & The differ —

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ence in specific gravity may  
detect the third.

Medical properties—

They make a local impres-  
sion upon the stomach &  
bowels—producing a cordial-  
warming influence, are more  
stimulating than tonics, less  
so than diffusible stimulants.

They allay sickness—obviate  
flatulence & relieve pain.—

Made use of as adjuvants.

Objectionable in decoction  
and Extract.

Orange Peel. Aurantio cortex.—

Plant Citrus Aurantium.

2 varieties—Sweet & Bitter.—

Bitter or Seville, true—Sweet more  
aromatic, better portion active.  
Used in Infusion, Sweet as an  
adjuvant, to emetics & purgatives.—

Confection white.

Orange water





Cinnamon—

71

Cinnamomum—

Bark of the Laurus cinnamomum. Native of Ceylon.—

Character of the tree—

Bark stripped of scraped and dried.—

Properties of Cinnamon.—

Cassia—what? whence derived—  
from China.—

Another species.—or variety—

Its character.

Differences between them.—

Principles—volatile oil & tannin—  
2 oils—characters.—

Menstrua alcohol & water.—

Useful as an adjuvant. & contains an astringent principle.—

Dose of powder 20 grs—

Used in Infusion with other—

Medicines ʒi or ij— to ʒj—

Aq. Cinnamomi. Steam prepa—





red. - ʒi to ʒj - Magnesia ʒ ʒ  
Tr. Cinnamon - ʒi -

### Canela -

Bark of the Canela alba

Tree - West Indies -

Characters of bark. -

Taste & smell. -

Powder -

Active ingredients bitter ex-  
tractive volatile oil.

Aromatic & Tonic -

Powder of Alves & Canela - cal-  
led Alira pica.

Cloves - Caryophyllus. - Ls. -

Unexpanded flowers of the -

Eugenia caryophyllata

Native of Moluccas - Ambon -  
& Ternate. -

Character -

odor & taste.

oil of cloves - characters. -

Powder ʒ to ʒj.

Infusion - ʒi to ʒj -

oil 2 to 5 drops. Adjuvant.

See. 3. 1. of the ...  
To ... 3.

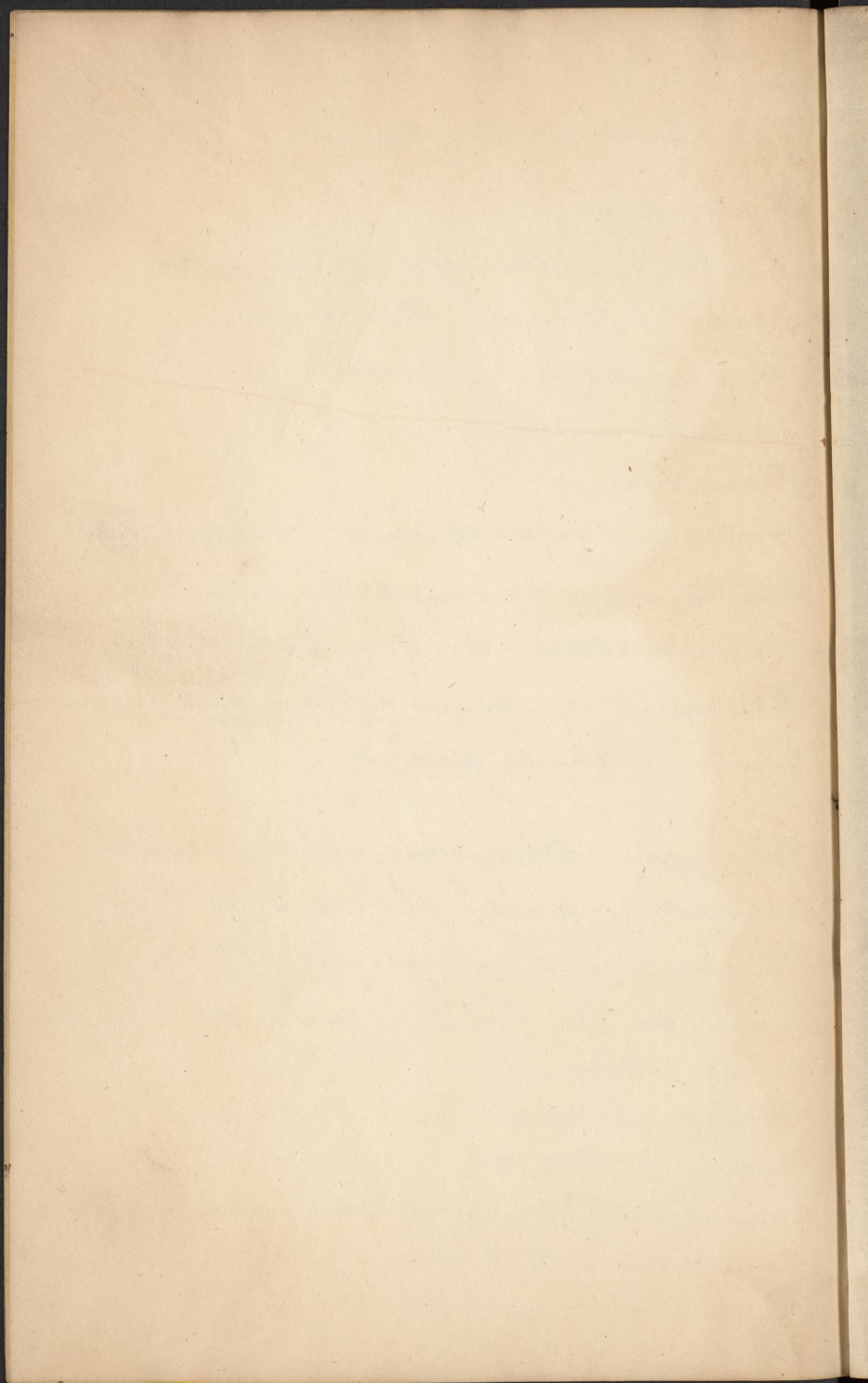
Canella  
Bark of the Canella ...  
Tree - West Indies -  
Characteristic of bark. -  
Taste ...

Pimenta -  
Active ingredient ...  
Characteristic ...  
Characteristic of bark -  
Pimenta of West Indies -  
Taste ...

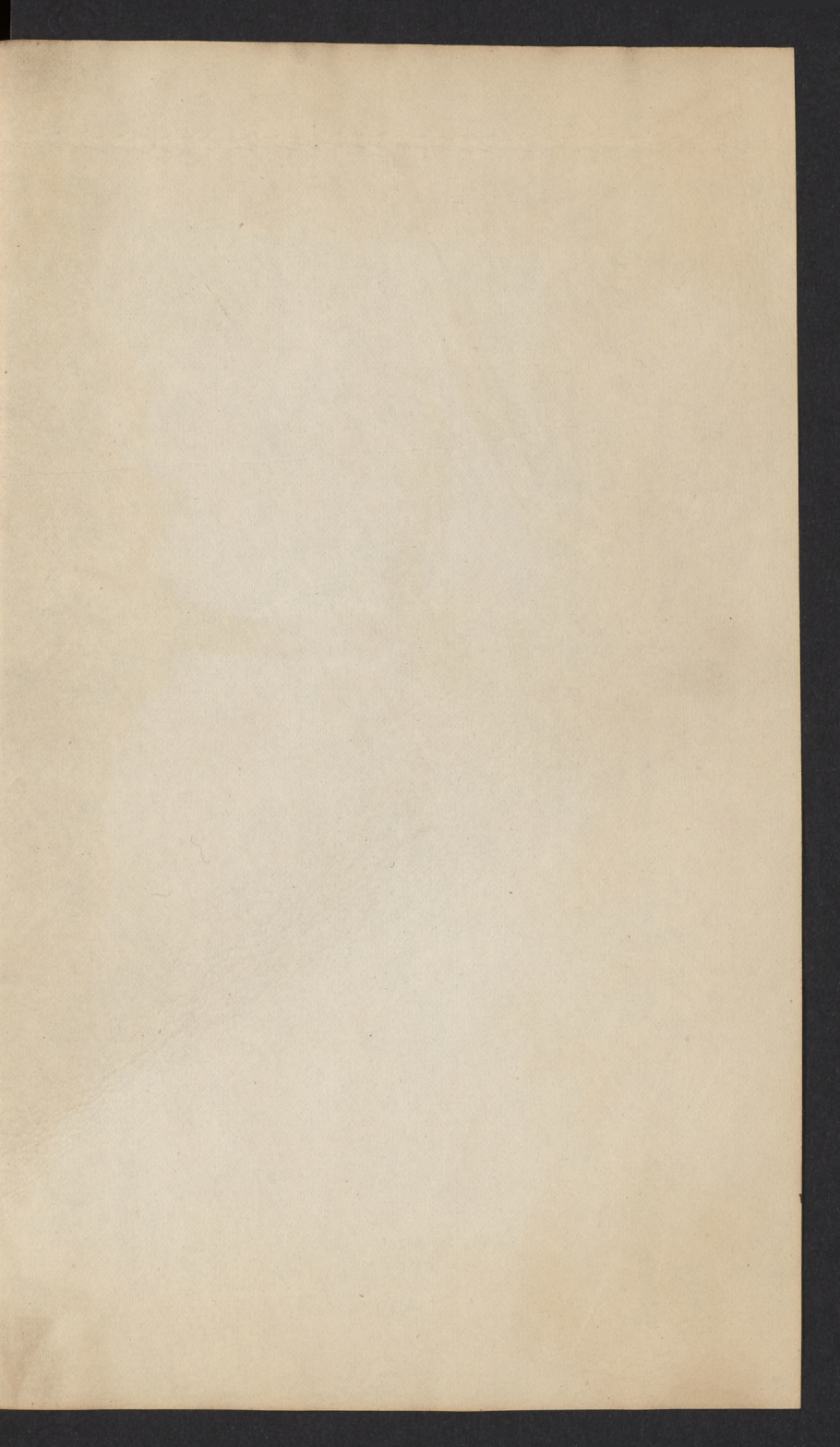
Peperomia -  
Characteristic ...  
Pimenta of ...  
Characteristic ...  
Pimenta of ...  
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Characteristic ...

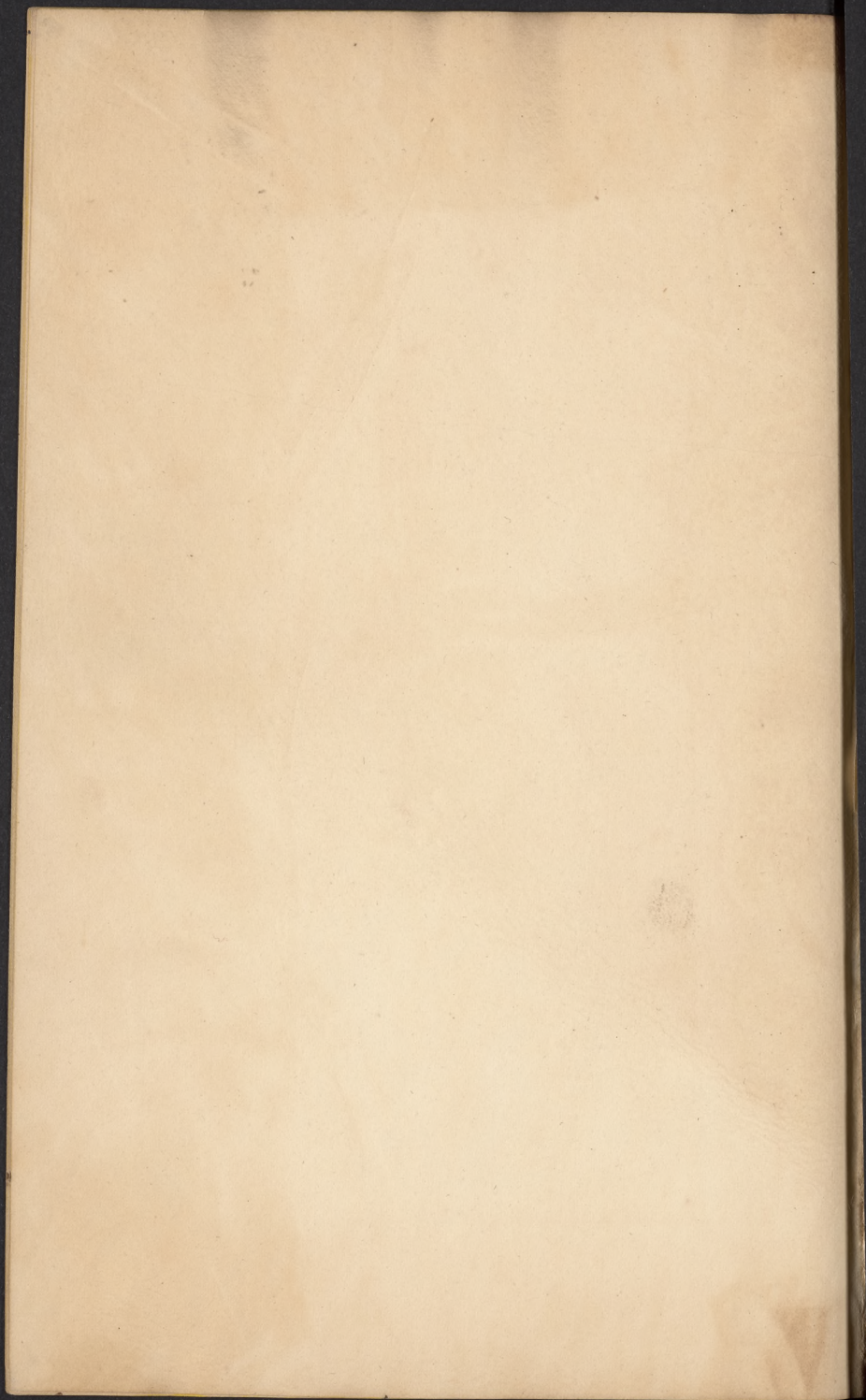


73











74



